

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	shimamoto-toshitaka.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:47
L2	51	kawaguchi-yasutoshi.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:54
L3	208	hasegawa-yoshiaki.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:57
L4	278	ishibashi-akihiko.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:57
L5	387	kidoguchi-isao	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:58
L6	387	kidoguchi-isao.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:58
L7	245	yokogawa-toshiya	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:58
L8	0	"yokogawa-toshiya.in"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:58
L9	245	yokogawa-toshiya.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 14:58
L10	930796	matsuhsita.as.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 15:00
L11	14	!10 and (vertical\$3 and lateral\$3) near5 (grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 15:03

L12	0	i10 and (coalscence or coalsce)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 15:04
L13	38	i10 and (coalescence or coalesce)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/29 15:04
S1	2812	(Group III nitride or semiconductor near3 nitride or AlGaN or AlGaN or aluminum gallium indium nitride or aluminum gallium nitride) with (CVD or PVD or chemical vapor or physical vapor or sputter\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:04
S2	29399173	@ad< "20041122"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:05
S3	1836	S1 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:05
S4	709	(Group III nitride or semiconductor near3 nitride or AlGaN or AlGaN or aluminum gallium indium nitride or aluminum gallium nitride) with (PVD or physical vapor or sputter\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:16
S5	447	S4 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:18
S6	0	(Group III nitride or semiconductor near3 nitride or AlGaN or AlGaN or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical grow\$3 adj5 (larger or greater or more) adj5 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:39
S7	0	(Group III nitride or semiconductor near3 nitride or AlGaN or AlGaN or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical grow\$3 adj10 (larger or greater or more) adj10 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:39

S8	0	(vertical grow\$3 adj10 (larger or greater or more) adj10 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S9	1244	(vertical adj10 (larger or greater or more) adj10 lateral)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S10	15	(Group III nitride or semiconductor near3 nitride or AlGaN or AlGaN or aluminum gallium indium nitride or aluminum gallium nitride) and (vertical adj5 (larger or greater or more) adj5 lateral )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 10:40
S11	40	"6582986"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/03/26 11:23
S12	40	("4498093"   "4971928"   "5145809"   "5962875"   "6043146"   "6051849"   "6121121"   "6139629"   "6177688"   "6225650"   "6413627").PN. OR ("6582986").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/03/26 14:13
S13	43	("4498093"   "4971928"   "5145809"   "5962875"   "6043146"   "6051849"   "6121121"   "6139629"   "6177688"   "6225650"   "6413627").PN. OR ("6582986").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/06/22 10:21
S14	0	(vertical grow\$3 adj10 (width near5 (greater or higher or larger or wider)) adj7 lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04
S15	0	(vertical grow\$3 with (width near5 (greater or higher or larger or wider)) with lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04
S16	0	(vertical grow\$3 with (width near7 (greater or higher or larger or wider)) with lateral grow\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/22 12:04

S17	174	({"4127792"   "4522661"   "4651407"   "4865685"   "4876210"   "4912064"   "4946547"   "5122845"   "5389571"   "5397736"   "5549747"   "5710057"   "5760426"   "5786606"   "5815520"   "5877070"   "5880485"   "Re34861"). PN. OR ("6051849"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2009/06/22 14:24
S18	9	({"4971928"   "5814533"   "5962875"   "6051849"   "6121121"   "6139629"   "6153010"   "6177688"   "6413627").PN. OR ("6955977").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2009/06/22 15:44
S19	492	(438/481).OCLS.	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	OR	OFF	2009/06/22 15:56
S20	11	({"4971928"   "5962875"   "5970314"   "6051849"   "6121121"   "6139629"   "6177688").PN. OR ("6812053").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2009/06/22 15:58
S21	6	({"4971928"   "5962875"   "6051849"   "6121121"   "6139629"   "6177688"). PN. OR ("6803602"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2009/06/22 15:59
S22	19	(US-20030180580-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486-\$ or US-7208393-\$ or US- 6921673-\$ or US-6890785-\$ or US-6225650-\$ or US- 6121121-\$ or US-6051849-\$ or US-7176497-\$ or US- 7154128-\$ or US-7141444-\$ or US-7052979-\$ or US- 6967122-\$ or US-6955977-\$ or US-6881651-\$ or US- 6815241-\$).did. or (WO- 0127980-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 09:06
S23	10	S22 and (InAlGaN or AlGaN or AlInGaN or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium indium nitride)	US-PGPUB; USPAT; USOOR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 09:07

S24	2	("6940103").PN.	US-PGPUB; USPAT; USOOCR; EPO; JPO; DERWENT	OR	OFF	2009/06/23 09:45
S25	20	(US-20030180580-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$).did. or (WO-0127980-\$). did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 10:01
S26	10	S25 and (bandgap or band gap)	US-PGPUB; USPAT; USOOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 10:01
S27	19	(active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap) near5 (cladding or contact) (layer or film or material)	US-PGPUB; USPAT; USOOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 10:21
S28	209	((active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap)) with (benefit \$4 or increas\$3 or decreas \$3 or provids\$3 or reduc\$3 or advantag\$4 or improv \$3 or serve or help or enhanc\$3)	US-PGPUB; USPAT; USOOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:16
S29	2	((active (layer or region) or quantum well or MQW or SQW or QW) near5 (smaller or lower) near5 (bandgap or band gap or band-gap)) adj10 (InAl/GaN or Al/GaInN or AlInGaN or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium indium nitride)	US-PGPUB; USPAT; USOOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:23

S30	3	"20040079960"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 11:35
S31	72	(substrate) near5 (compris \$4 or made) near5 (InAlGaN or AlGaN or AlInGaN or aluminum indium gallium nitride or indium aluminum gallium nitride or aluminum gallium indium nitride)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 14:30
S32	22	(US-20030180580-\$ or US- 20040079960-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$ or US-7071015-\$).did. or (WO-0127980-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 14:30
S33	0	S32 and S31	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 14:30
S34	24	(US-20030180580-\$ or US- 20040079960-\$ or US- 20060078024-\$).did. or (US-6582986-\$ or US- 7101444-\$ or US-7115486- \$ or US-7208393-\$ or US- 6921673-\$ or US-6890785- \$ or US-6225650-\$ or US- 6121121-\$ or US-6051849- \$ or US-7176497-\$ or US- 7154128-\$ or US-7141444- \$ or US-7052979-\$ or US- 6967122-\$ or US-6955977- \$ or US-6881651-\$ or US- 6815241-\$ or US-6940103- \$ or US-7071015-\$).did. or (WO-0127980-\$ or US- 20010053618-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/06/23 15:07
S35	0	S34 and (buffer layer near7 (change or changing) near7 (thickness or growth or growing) direction)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08

S36	0	S34 and (buffer layer near7 (change or changing) near7 (thickness or growth or growing))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08
S37	203	(buffer layer near7 (change or changing) near7 (thickness or growth or growing))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08
S38	5	(buffer layer near7 (change or changing) near7 (thickness or growth or growing) direction)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2009/06/23 15:08
S39	26	(US-20030180580-\$ or US-20040079960-\$ or US-20060078024-\$ or US-20080073716-\$).did. or (US-6582986-\$ or US-7101444-\$ or US-7115486-\$ or US-7208393-\$ or US-6921673-\$ or US-6890785-\$ or US-6225650-\$ or US-6121121-\$ or US-6051849-\$ or US-7176497-\$ or US-7154128-\$ or US-7141444-\$ or US-7052979-\$ or US-6967122-\$ or US-6955977-\$ or US-6881651-\$ or US-6815241-\$ or US-6940103-\$ or US-7071015-\$ or US-5042043-\$).did. or (WO-0127980-\$ or US-20010053618-\$).did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:00
S40	5	S39 and (lateral or vertical) near5 (wider or greater or larger)	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:05
S41	4	vertical adj7 (growth or growing or grown) adj7 (larger or wider or greater) adj7 lateral	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:09
S42	1224	(stripe or ridge) near6 (wider or larger or greater) near6 (groove or opening or trench)	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:37
S43	1231	(stripe or ridge or striped) near6 (wider or larger or greater) near6 (groove or opening or trench)	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:38
S44	0	S43 and (vertical and lateral) near3 (growth or grown or grow or growing)	US-PGPUB; USPAT; DERWENT	ADJ	ON	2010/01/25 15:38

S45	7	S43 and (vertical and lateral) near3 (growth or grown or grow or growing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/25 15:39
S46	48	("20020046693"   "20020052084"   "20030037722"   "20030160232"   "4806996"   "4952526"   "5019874"   "5075744"   "5091767"   "5156995"   "5208182"   "5210051"   "5221367"   "5290393"   "5306662"   "5482890"   "5633516"   "5719894"   "5741724"   "5838029"   "5859864"   "5888885"   "5927995"   "5928421"   "5960018"   "5972801"   "6087681"   "6153010"   "6160833"   "6177688"   "6184144"   "6194742"   "6225650"   "6287947"   "6498111"   "6534797"   "6537513"   "6582986"   "6602763"   "6627520"   "6627974"   "6630691"   "6630692").PN. OR ("7101444").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/01/26 08:31
S47	12	("6046465"   "6153010"). PN. OR ("6362515"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/01/26 08:56
S48	0	"200386905"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/01/26 09:05
S49	0	"2003086905"	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/01/26 09:05
S50	4	"2003086905"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/26 09:05
S51	2	"20029004"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/26 09:06
S52	6	"2002009004"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2010/01/26 09:06

S53	16	( "5185290"   "5798536"   "6051849"   "6110277"   "6121121"   "6146457"   "6153010"   "6255198"   "6274518"   "6319742"   "6329667"   "6348096"   "6355497"   "6365921" ). PN. OR ("6881651"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 14:27
S54	33	( "4482422"   "4578142"   "4612072"   "4908074"   "5090932"   "5290393"   "5482002" ).PN. OR ("6348096").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 14:28
S55	12	( "20010026950"   "20010040246"   "20010041427"   "5777350"   "6015979"   "6153010"   "6201823"   "6316785"   "6348096"   "6673149"   "6864160"   "6934751" ).PN. OR ("7355208").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 14:30
S56	25	( "20020090816"   "20020102819"   "20020102830"   "20020115265"   "20020182889"   "5766695"   "6071795"   "6113685"   "6210479"   "6274518"   "6303405"   "6348096"   "6426519"   "6447938"   "6448102" ). PN. OR ("6562701"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 14:36
S57	16	( "20020056846"   "20020145148"   "20020182839"   "20030087467"   "20030143771"   "20030180977"   "20030183827"   "20030203629"   "5981977"   "6113685"   "6377596"   "6426264"   "6562701"   "6617261"   "6677173" ).PN. OR ("6806109").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 14:38
S58	16	( "5218216"   "6252253"   "6326638"   "6329667" ). PN. OR ("6426519"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/26 15:44
S59	7073	(stripe or strip or ridge) and (coalescence or coalesce)	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/27 09:40

S60	7170	(stripe or strip or ridge) and (coalescence or coalesce)	US-PGPUB; USPAT; USOOR; EPO; JPO; DERVENT	ADJ	ON	2010/01/27 09:40
S61	187	S60 and (vertical\$3 or lateral\$3) near5 (grown or growing or grow or growth)	US-PGPUB; USPAT; USOOR; EPO; JPO; DERVENT	ADJ	ON	2010/01/27 09:41
S62	31295660	@ad<"20051115"	US-PGPUB; USPAT; USOOR; EPO; JPO; DERVENT	ADJ	ON	2010/01/27 09:42
S63	145	S61 and S62	US-PGPUB; USPAT; USOOR; EPO; JPO; DERVENT	ADJ	ON	2010/01/27 09:43
S64	26	("20030042496"   "20030143771"   "20030162340"   "20040016396"   "20040124434"   "20040144300"   "20040147096"   "20040183090"   "20040262630"   "20050000407"   "20050011432"   "20050082564"   "3811963"   "3933538"   "5868837"   "6121121"   "6252255"   "6270569"   "6447604"   "6471770"   "6503610"   "6592663"   "6614059"   "6667252"   "6720586").PN. OR ("7524691").URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/27 09:46
S65	11	("20010050376"   "20020137249"   "5814839"   "6312967"   "6498048"   "6821804"). PN. OR ("6984841"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/27 10:04
S66	11	("20010050376"   "20020137249"   "5814839"   "6312967"   "6498048"   "6821804"). PN. OR ("6984841"). URPN.	US-PGPUB; USPAT; USOOR	ADJ	ON	2010/01/27 13:53

1/29/2010 4:18:26 PM

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